

Amendments to the Claims

A complete set of the existing claims are set forth below; with the amended claims showing deletions (strikethrough and insertions (underline)).

1. – 16. (Cancelled)

17. (Currently amended) The method of Claim 21~~46~~, wherein the first length and the second length are different.

18. (Original) The method of Claim 17, wherein the first payload and the second payload are different.

19. (Original) The method of Claim 18, further comprising counting the number of packets transmitted by the test packet generator.

20. (Currently amended) The method of Claim 21~~46~~, wherein transmitting from the test packet generator comprises communicating data onto a parallel bus.

21. (Currently amended) A method for testing network communication equipment with a test packet generator, comprising:

_____ a) transmitting, from the test packet generator, a synchronization packet;

_____ b) generating a first data packet including a first header and a first payload;

_____ c) transmitting, from the test packet generator, the first data packet;

_____ d) providing a first inter-packet gap of a first length;

_____ e) generating a second data packet including a second header and a second payload;

_____ f) transmitting, from the test packet generator, the second data packet;

_____ g) providing a second inter-packet gap of a second length;

_____ h) repeating steps (b) through (g) at least once;

wherein the first header is different from the second header;

wherein ~~the method of Claim 16,~~ further comprising counting the number of packets transmitted, receiving the packets, counting the received packets, and counting the received packets with errors;

wherein the first and second inter-packet gaps are each an integer multiple of 8 bytes, the first header and second header are each 20 bytes long, and the first and second headers contain different data, and

wherein the size of the first packet is representative of a control packet on an Internet backbone, and the size of the second packet is representative of a data packet on the Internet backbone.

22. (Original) The method of Claim 21, further comprising programming the content of the first packet header and the second packet header by executing software which results in writing to at least two sets of packet header registers.

23. (Original) The method of Claim 22, further comprising programming the content of the first payload and the second payload by executing software which results in setting one or more bits in at least two payload pattern registers.

24. (Original) The method of Claim 23, further comprising programming the size of the first packet and the second packet by executing software which results in writing packet size control information into at least two packet size control registers.

25. (Cancelled)

26. (Cancelled)

27. (Currently amended) The method of Claim ~~33~~26, further comprising, after a second inter-packet gap, transmitting the first test packet.

28. (Original) The method of Claim 27, further comprising after a second occurrence of the first inter-packet gap, transmitting the second packet.

29. (Original) The method of Claim 28, wherein the first payload and the second payload are different.

30. (Original) The method of Claim 28, wherein the first payload and the second payload are the same.

31. (Original) The method of Claim 27, wherein programming the first set of registers comprises writing data into one or more registers so as to define:

- 1) a total number of bytes in the first test packet;
- 2) a size of a gap between the transmission of the first and second test packets;
- 3) a pattern used to fill the first payload; and
- 4) a content of the first header.

32. (Original) The method of Claim 27, wherein programming the second set of registers comprises writing data into one or more registers so as to define:

- 1) a total number of bytes in the second test packet;
- 2) a size of a gap between the transmission of the second and first test packets;
- 3) a pattern used to fill the second payload; and
- 4) a content of the second header.

33. (Currently amended) A method of testing network communications equipment, comprising:

- a) programming a first set of registers that define a format of a first test packet;
- b) programming a second set of registers that define a format of second test packet;
- c) transmitting a synchronization packet;
- d) transmitting the first test packet;

e) transmitting, after a first inter-packet gap, the second test packet;
wherein the first test packet comprises a first packet header, and a first
payload; and the second test packet comprises a second packet header, and a second
payload; wherein the first and second packet headers are different; and
wherein t~~The method of Claim 26, further comprising~~ receiving the
synchronization packet, receiving the first test packet, receiving the second test packet,
incrementing a first counter to record the number of received packets; determining if the
first test packet was received correctly, and determining if the second test packet was
received correctly.

34. (Original) The method of Claim 33, further comprising incrementing a second counter if any received test packet contains an error.

35. (Original) The method of Claim 33, further comprising incrementing a third counter each for each test packet that is transmitted by the test generator.

36. (Original) The method of Claim 33, wherein transmitting the synchronization packet and receiving the synchronization packet are performed on a single chip.

37. (Currently amended) The method of Claim-A_33, wherein transmitting the synchronization packet is performed on a first integrated circuit chip, and receiving the synchronization packet is performed on a second chip.

38. – 45. Cancelled